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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/609,084	06/27/2003	Bruce Lee	PH/5-21028B/C2	7443
26748	7590	12/11/2006	EXAMINER	
SYNGENTA CROP PROTECTION, INC. PATENT AND TRADEMARK DEPARTMENT 410 SWING ROAD GREENSBORO, NC 27409			CAPPS, KEVIN J	
			ART UNIT	PAPER NUMBER
			1617	

DATE MAILED: 12/11/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

T4

<b>Office Action Summary</b>	<b>Application No.</b> 10/609,084	<b>Applicant(s)</b> LEE ET AL.	
	<b>Examiner</b> Kevin Capps	<b>Art Unit</b> 1617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 15 December 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 17-37 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 17-37 is/are rejected.
- 7) ☒ Claim(s) 22, 24, and 26 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Status of the Claims***

1. This Office Action is in response to the remarks, Amendments, and Terminal Disclaimer filed on December 15, 2005. Claims 17-37 are pending and examined on the merits herein.

### ***Terminal Disclaimer***

2. The terminal disclaimer filed on December 15, 2005, disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of US Patent 6,586,367 has been reviewed and is accepted. The terminal disclaimer has been recorded. Therefore the double patenting rejection is withdrawn.

### ***Claim Objections***

3. Claims 22, 24, and 26 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. The compositions utilized in the methods of claims 22, 24, and 26 comprise combinations that were specifically excluded in the independent claim 18. Specifically, all combinations containing (open language) glyphosate and atrazine were excluded from

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use on glyphosate-resistant maize by the proviso in claim 18, and all of the compositions employed in claims 22, 24, and 26 contain glyphosate and atrazine for use on glyphosate-resistant maize. Therefore, the limitations are not further limiting. Also, atrazine is not listed as an optional herbicide in claim 20, from which claims 22, 24, and 26 depend.

4. Claim 17 is objected to because of the following informalities: On line 4 of claim 17, the word ---and--- should be inserted after "glyphosate,". Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

5. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

6. Attention is directed to *In re Wands*, 8 USPQ2d 1400 (CAFC 1988) at 1404 where the court set forth the eight factors to consider when assessing if a disclosure would have required undue experimentation. Citing *Ex parte Forman*, 230 USPQ 546 (BdApls 1986) at 547 the court recited eight factors:

(1) the nature of the invention; (2) the state of the prior art; (3) the relative skill of those in the art; (4) the predictability or unpredictability of the art; (5) the breadth of the claims; (6) the amount of direction or guidance presented; (7) the presence or absence of working examples; and, (8) the quantity of experimentation necessary.

7. Claims 17-37 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which

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was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

8. Applicant's claims are directed to a method of controlling weeds in cultivations of useful plants, said method comprising the step of exposing the cultivations to a composition comprising glufosinate or glyphosate and a synergistic amount of at least one other herbicide selected from a Markush group of alternatives. The concept of synergism is recognized in the art as meaning an observed efficacy of a combination of agents that is greater than the sum of each component's efficacy alone. The process of determining which compounds when formulated as a combination act synergistically, as well as the amounts of the compounds needed to achieve synergism, is highly unpredictable. In fact, synergism can be an indicator of non-obviousness of a combination of known agents given the unpredictability of achieving the property (see MPEP § 716.02(a), paragraph I). Due to the unpredictability of achieving synergism with a combination of agents, a claim to synergistic activity must be supported by a disclosure that presents data demonstrating the effect, as well as guidance regarding the amounts of the agents that should be combined to achieve synergism. Applicant's specification does not demonstrate synergism of the agents in controlling weeds and gives little guidance to as to what amounts act synergistically.

9. The only guidance towards the amounts of the compounds employed in the method is on p. 10 of the specification. Applicant states that "glufosinate or glyphosate is preferably present in a weight ratio of 1:10 to 1000:1 in relation to the other

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herbicide(s)" in the compositions employed in the method (p. 10). This is an extremely broad range, encompassing compositions comprising from only 9% glufosinate or glyphosate to almost entirely glufosinate or glyphosate. Further, even though this is an extremely broad range of combinations that is claimed to have synergistic efficacy in controlling weeds, Applicant has not demonstrated synergism for even one combination within this range. The only data reported for the efficacy of the claimed method is on pp. 18-19. First, it is noted that these examples appear to be prophetic because they are written in the present tense. Given the unpredictability of synergism, as discussed above, prophetic examples cannot be considered enabling for a claim to synergistic activity. Second, no data is reported on the synergistic activity of any of the claimed combinations of compounds. Thus, again, there is no data in the specification that supports a claim to synergistic activity, or offers guidance as to what amounts of the compounds should be combined to achieve a synergistic efficacy in controlling weeds. Therefore, the instant specification is non-enabling for a claim to synergistic efficacy in controlling weeds with the combinations of compounds employed in the method.

### ***Conclusion***

10. No claims are allowed.

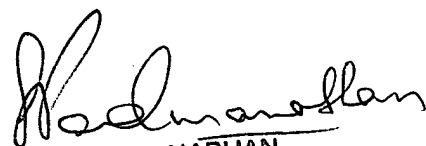
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin Capps whose telephone number is (571) 272-8646. The examiner can normally be reached on Monday-Friday, 7:30am-5pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sreenivasan Padmanabhan can be reached on (571) 272-0629. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

KC

  
SREENI PADMANABHAN  
SUPERVISORY PATENT EXAMINER